#### **ORIGINAL**

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EX PARTE OR LATE FILED

October 29, 1999

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FEDERAL COMMUNICATIONS COMMUNICATION

#### **BY HAND**

Magalie Roman Salas, Secretary Federal Communications Commission 445 Twelfth Street, S.W. - Suite TW-A325 Washington, D.C. 20554

Re: WT Docket No. 99-168

Ex Parte Presentation
Service Rules for the 746-764 and 776-794 MHz Bands,
And Revisions to Part 27 of the Commission's Rules

Dear Ms. Salas:

On October 28, 1999, Mike Farmwald and Arvin Shahani of FreeSpace Communications and Ruth Milkman and Charles Logan of Lawler, Metzger & Milkman met with Ari Fitzgerald of Chairman Kennard's office and Mark Schneider of Commissioner Ness's office. In addition, Richard Metzger, Charles Logan, and Arvin Shahani met with Christopher Wright, Joel Kaufman, and Jane Halprin of the Office of General Counsel. On October 27, 1999, Mike Farmwald, Arvin Shahani, Ruth Milkman, Charles Logan, and Janice Obuchowski of Freedom Technologies Inc. met with Thomas Sugrue, James Schlichting, Kathleen Ham, Kris Monteith, and Marty Leibman of the Wireless Telecommunications Bureau, and with Dale Hatfield, Julius Knapp, Robert Calaff, and Thomas Derenge of the Office of Engineering and Technology.

In these meetings, FreeSpace Communications set forth a proposal for licensing spectrum for commercial services in the 746-764 and 776-794 MHz bands. That proposal is described in a letter filed with the Commission October 13, 1999 and also in a written *ex parte* presentation, dated October 27-28, that was handed out during the meeting and that is enclosed with this filing. We also discussed FreeSpace's position, as described in the enclosed letter to Mr. Sugrue dated October 27, 1999, regarding a proposal by Motorola, Inc. to set aside a portion of these bands for exclusive private radio use. FreeSpace believes it would be contrary to section 337 of the Communications Act for the Commission to adopt a spectrum plan that would preclude parties such as FreeSpace that intend to provide commercial services from bidding on this spectrum. A copy of the October 27, 1999 letter to Mr. Sugrue was also delivered this day to Peter Tenhula in Commissioner Powell's office, Adam Krinsky in Commissioner Tristani's office, Bryan Tramont in Commissioner Furchtgott-Roth's office, and Robert Pepper, Evan Kwerel, Bruce Franca, Nancy Boocker, Stanley Wiggins, Jane Phillips, and Gregory Vadas of the Commission staff.

No. of Copies rec'd OH List ABCDE Pursuant to section 1.1206(b)(1) of the Commission's rules, 47 C.F.R. § 1.1206(b)(1), an original and one copy of this letter and enclosure are being provided to you for inclusion in the public record of the above-referenced proceeding.

Sincerely,

Charles W. Logan

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#### **Enclosures**

cc: Thomas Sugrue James Schlichting

Kathleen Ham Kris Monteith
Marty Leibman Dale Hatfield
Julius Knapp Robert Calaff
Thomas Derenge Ari Fitzgerald
Mark Schneider Christopher Wright

Joel Kaufman
Evan Kwerel
Nancy Boocker
Jane Phillips
Robert Pepper
Bryan Tramont

Jane Halprin
Bruce Franca
Stanley Wiggins
Gregory Vadas
Peter Tenhula
Adam Krinsky

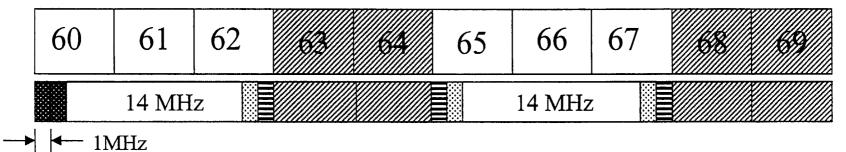
## FREESPACE COMMUNICATIONS

Ex Parte Presentation
October 27-28, 1999
Service Rules for 746-764/776-794 MHz Bands
WT Docket No. 99-168

### Overview

- FreeSpace's proposal will facilitate new, innovative broadband services to consumers, including those living in underserved areas.
- FreeSpace's proposed band plan provides maximum interference protection to public safety communications.
- The FCC should *not* set aside guard bands for exclusive private radio use.

## FreeSpace Communications Channels 60-69 Proposal



License eight 1MHz, paired channels with no use restrictions for innovative, low power uses that protect public safety band:

4 mW/kHz = 20 mW/kHz = 20 mW/kHz

Public Safety

License remaining 28MHz for higher powered mobile and fixed wireless services:

Two 14MHz bands for mobile & fixed wireless services

# Providing Maximum Protection for Public Safety

- Creates low power *guard bands* around public safety spectrum
  - Clear, effective way to protect both current and future public safety uses
  - FreeSpace system will comply with any out-of-band spurious emissions limits necessary to protect public safety operations
- Superior to private radio guard band proposal, which relies on coordination efforts rather than power limits
  - Coordination is cumbersome and will not adequately protect *future* public safety facilities
- FreeSpace is working with public safety representatives regarding its proposal

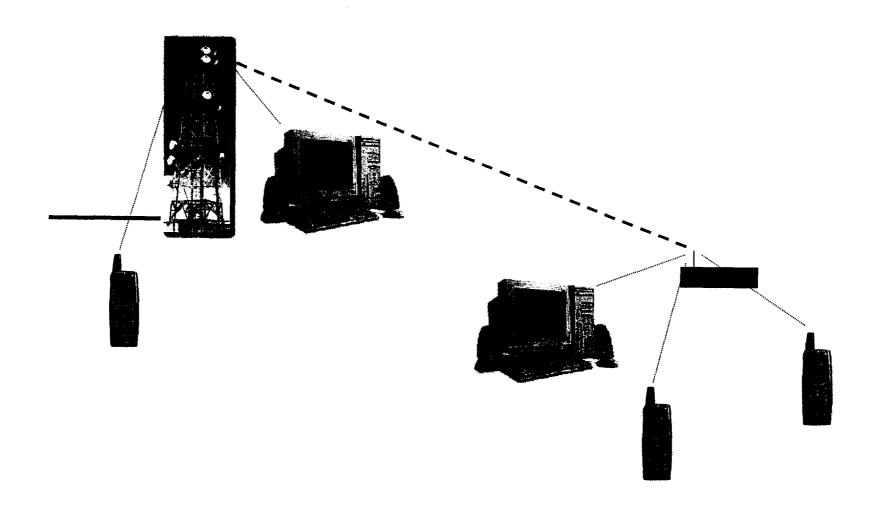
#### Consumer Benefits

- Proposed band plan supports *new*, *innovative* uses of spectrum such as FreeSpace system, which will offer consumers inexpensive broadband internet access (up to 2 Mbps) and voice services.
- FreeSpace technology involves significantly lower infrastructure, equipment and maintenance costs, which means *less expensive* wireless services for consumers.
- FreeSpace system will extend wireless and internet services to *underserved communities*.

## FreeSpace Technology

- An inexpensive, organic, broadband wireless communications network
  - Inexpensive
    - Infrastructure is significantly less expensive than existing systems
  - Organic
    - Network is exceptionally flexible, dynamic and self-configuring
    - Spectrum use is on-demand, rather than planned
  - Broadband
    - Extends and integrates seamlessly with the internet
    - Supports high data rate services

## Network Architecture



### Serving Underserved Areas: Tribal Lands Example

- A reservation might have:
  - Population 150,000, 76% without phone service
  - 25,000 square mile area
    - 5 locations w/ more than 2000 people
    - 30 locations w/ more than 20 dwellings
  - Median family income ~ \$15,000 / year
- High infrastructure costs for existing wireline and wireless systems deter service to such sparsely populated areas.

## The FreeSpace Solution

- FreeSpace technology significantly reduces infrastructure costs, making it possible to offer affordable wireless voice and data services for the entire underserved area.
  - Inexpensive equipment for wireless voice & data cells
    - Powered entirely by solar panels / batteries
  - Connectivity between cells
    - Aggregate service to a few access points
- FreeSpace will:
  - Offer service directly, with build-out commitment, or
  - License technology and spectrum to a local provider, thereby encouraging self-determination.

# Nationwide Licensing and Bidding Credits

- License the eight 1 MHz, paired channels (with a minimum of 14 MHz separation) on a *nationwide basis*.
  - Provides for a ubiquitous, wireless network.
  - Promotes economies of scale.
    - Lowers the cost of serving rural or sparsely populated areas.
  - Received strong support in comments.
  - Facilitates interference coordination with existing broadcast stations.
- Adopt the small business definitions proposed in the *NPRM* and use bidding credits to promote small business entry and entrepreneurial innovation.

# The FCC Should Not Set Aside Spectrum For Particular Uses

- Section 337(a) requires the FCC to allocate the 746-764/776-794 MHz bands "for commercial use to be assigned by competitive bidding."
- Exclusive set-aside for private radio, either directly or through band manager concept, is contrary to this statutory directive given well understood distinction between such private uses and "commercial uses."
- Exclusive set-asides reduce auction revenues and are contrary to strong FCC policy of using auctions and the marketplace to maximize the efficient use of the spectrum.